Troy Futures

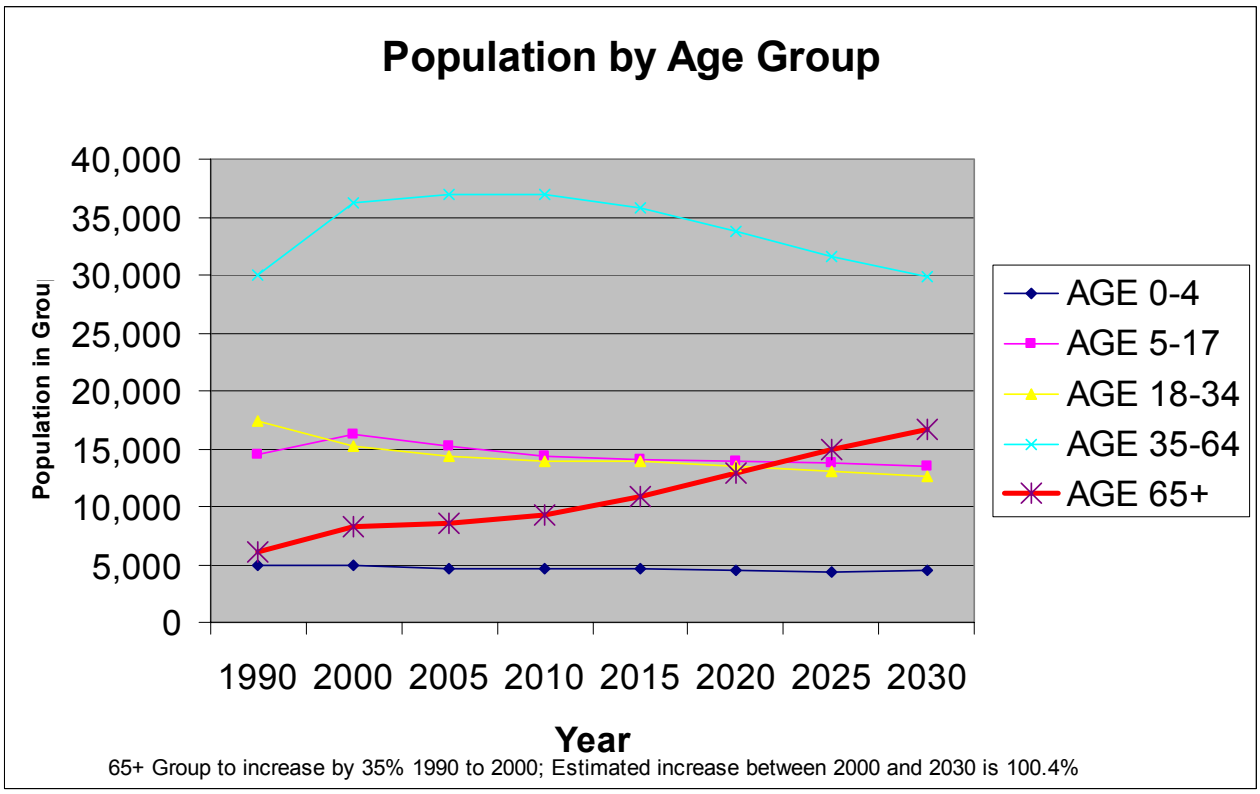
MOBILITY TASKFORCE

Description: Physical and virtual pathways to movement

The following are salient areas that we need to look at for developing physical and virtual pathways to movement of people and goods through the City of Troy. Descriptions and more details of these are contained in the collected literature.

Demographic pattern

Aging population



Source: SEMCOG

Total Population **1990: 72,884** **2000:80,959** **2005: 81,320** **2030: 77,046**

Traffic Crash
Distribution

	1995		2003		2004		% Increase	
	Total	Injury	Total	Injury	Total	Injury		
17 and under	494	155	306	82	327	84	6.862745	2.439024
18 to 34	3388	914	2221	565	2310	588	4.007204	4.070796
34-65	3306	1009	2380	628	2832	659	18.9916	4.936306
65 and above	374	126	331	78	378	109	14.1994	39.74359

Today, 35 million Americans are age 65 or older – about 13 percent of the population. By 2030, this number will double, to 70 million people. One in five Americans will be 65 or older. Troy statistics also demonstrate that the % increase in 65 and older will be 100% by 2030. Safe mobility options for the elderly become vital in planning the future for Troy. Traffic crash trends show that an increasing percentage of elderly are getting seriously hurt or killed in traffic crashes. In 2001, Michigan ranked #5 in the list of States with the highest number of elderly drivers killed.

Safer, easier-to-use roadways and walkways

New roadway designs that better accommodate the needs and limitations of older drivers and pedestrians, including land use that minimizes auto dependence and facilitates aging in place. This may include bigger and brighter signs, more visible traffic signals, better legible street name signs, pavement markings that are reflective, providing better channelization of the travel lanes.
Promote the use of guidelines and recommendations from FHWA *Highway Design Handbook for Older Drivers and Pedestrians*

Improved systems for assessing competency of older drivers and pedestrians

Better understanding of the characteristics that cause older drivers to be at increased risk; more effective procedures for identifying, assessing, training, rehabilitating, and regulating functionally limited drivers; better understanding of how to enable people with functional disabilities to walk safely.

Better, easier-to-use public transportation services

Public transportation systems that facilitate wider use by older people, including one-call-does-it-all mobility managers; evaluation and promulgation of best practices; elimination of programmatic barriers to coordinated delivery of transportation services; and intercity travel that is more elder friendly.

Better public information

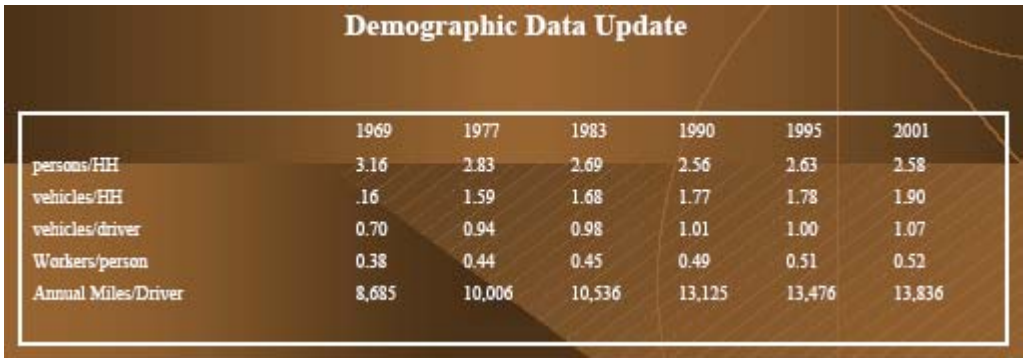
A comprehensive campaign to educate older people and their caregivers on how to identify unsafe older drivers; information for health and social service groups to equip them to address and extend the safe transportation needs of older people.

Small households (single or 2 person)

Immigration, Diversity -race, population segments

Race	1990 Census	2000 Census	2000 Census Alone or Combined
White	66,701 (92%)	66,627 (82%)	67,910 (82%)
Black	983 (1%)	1,694 (2%)	1,883 (2%)
American Indian	115 (0%)	125 (0%)	382 (0%)
Asian	4,932 (7%)	10,730 (13%)	11,299 (14%)
Pacific Islander	11 (0%)	18 (0%)	59 (0%)
Other Race	142 (0%)	292 (0%)	970 (1%)
Multi-Racial	n/a	1,473 (2%)	n/a
Total Population	**72,884**	**80,959**	**82,503** [1]

Source: SEMCOG



	1969	1977	1983	1990	1995	2001
persons/HH	3.16	2.83	2.69	2.56	2.63	2.58
vehicles/HH	.16	1.59	1.68	1.77	1.78	1.90
vehicles/driver	0.70	0.94	0.98	1.01	1.00	1.07
Workers/person	0.38	0.44	0.45	0.49	0.51	0.52
Annual Miles/Driver	8,685	10,006	10,536	13,125	13,476	13,836

For the Nation

Economic and labor force patterns

Flexible and fluid workforce (service industry)

De-industrialization

Worldwide trade

Women working (60% of women)

Land use patterns

Suburbanization

Dispersed residential area

Unattractiveness of center city as activity center Technologies

Communications/ information

alternative fuel

Travel Pattern

More auto trips, longer and chained trips

Dispersed origins and destinations

More congestion, more difficult to predict traffic growth

Commuting to Work

Means of Transportation to Work	1990 Census	2000 Census
Drove Alone	34,947 (90%)	37,276 (90%)
Carpool or Vanpool	2,504 (6%)	2,340 (6%)
Public Transportation	66 (0%)	143 (0%)
Walked to Work	382 (1%)	259 (1%)
Other Means	94 (0%)	216 (1%)
Worked at Home	729 (2%)	1,200 (3%)
Total Workers Age 16 or Older	**38,722**	**41,434**
Mean Travel Time to Work (In Minutes)	23	25

Source: SEMCOG

Nation

Greater reliance of foreign oil

Greater import cars, productivity reduction

Government service delivery

Decision making power shift

Equity

Environment

Air quality

Noise

Vegetation

Climate change

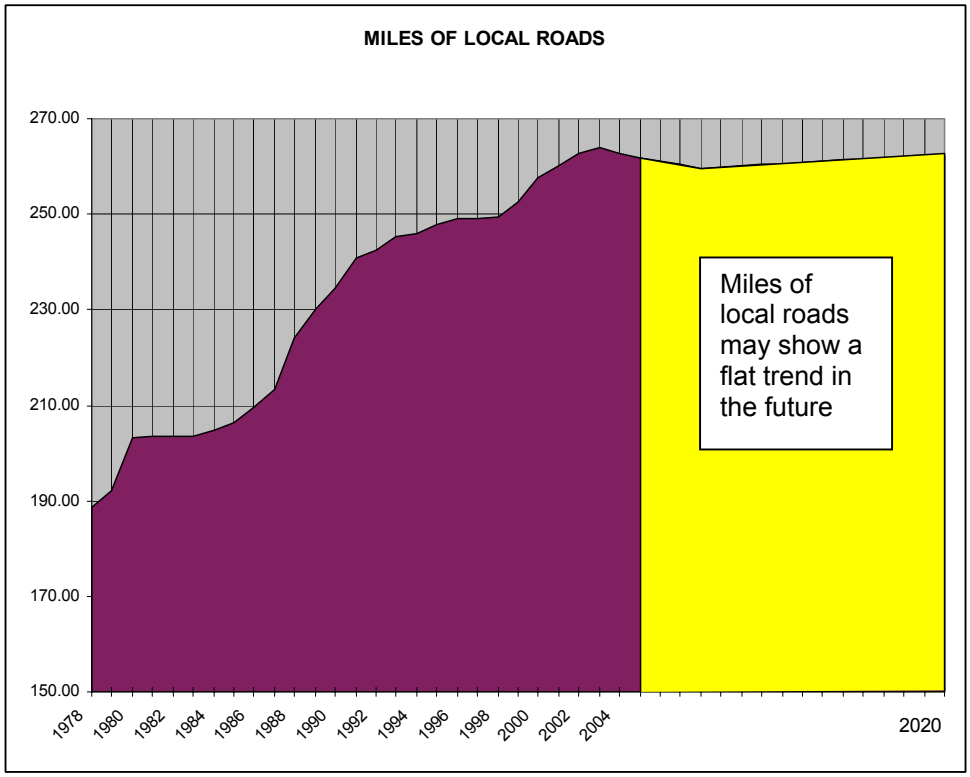
Livability

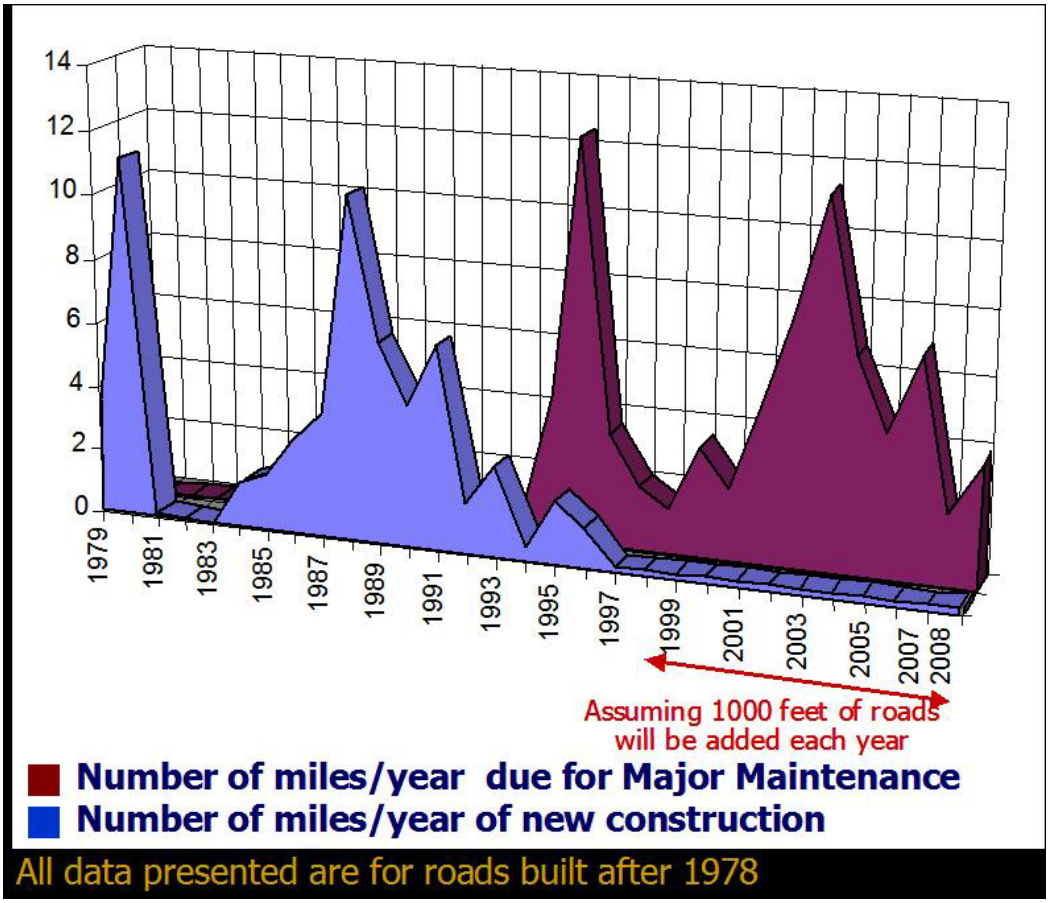
Technology

Alternative fuel, alternative power

Infrastructure

Deterioration / Maintenance and monitoring

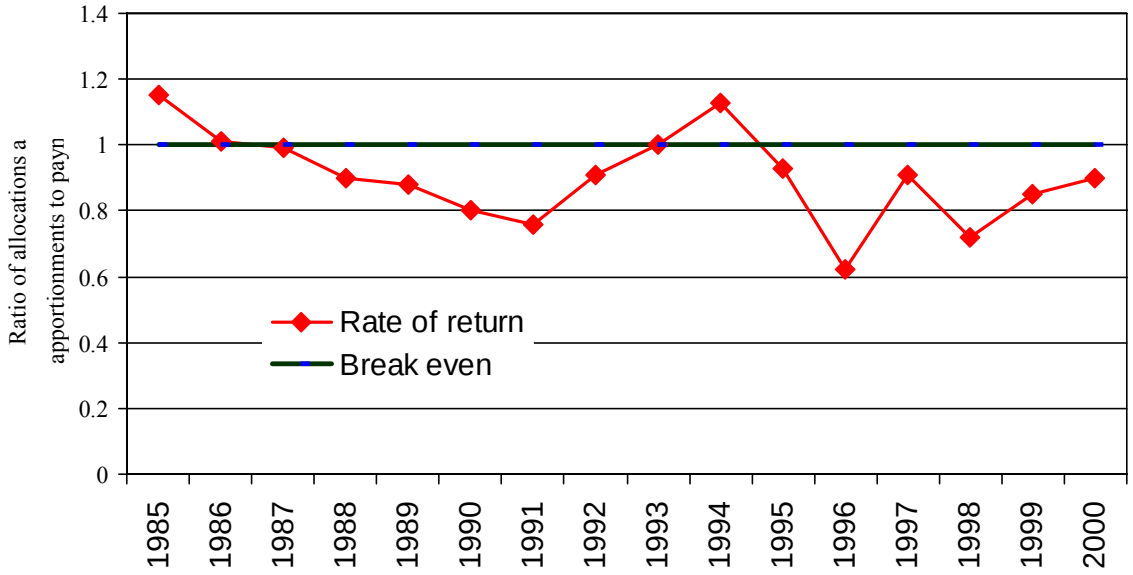




Real time control

Financing and cost responsibilities:

Michigan continues to be a donor state and may stay that way for a long time.



The SEMCOG 2030 Regional Transportation plan reports that for the 7 county South East Michigan Region:

We have nearly $70 billion in total transportation needs through 2030. Road needs are about $56 billion and transit needs are about $14 billion.

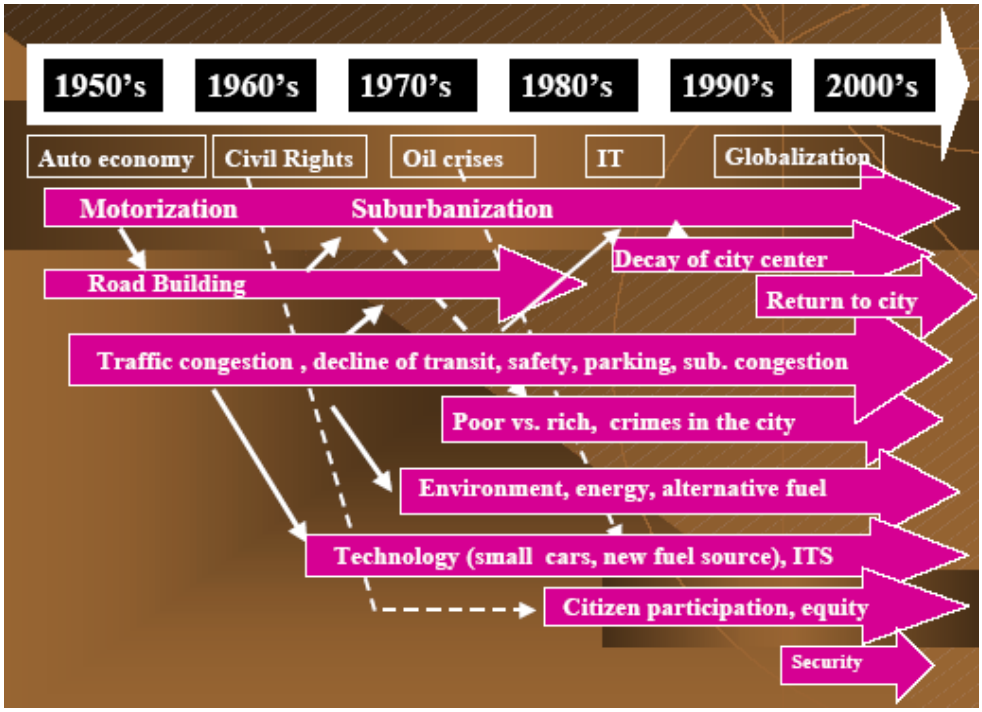
Local and state government have about $40 billion in combined revenues from federal, state, and local sources.

This leaves a $30 billion shortfall in revenues.

Given this shortfall, $25 billion is attributable to unmet road needs and $5 billion to unmet transit needs.

Closing this gap presents major challenges if state and local government are to meet the mobility needs of motorists and transit riders and the need to support our regional and state economy.

National Mobility Trends



Source: Prof. Shinya Kukuchi, Univ. of Delaware

Potential Solutions?

- Major/Local streets - Increase Capacity
- Improve Interchanges
- Improve Trails and Sidewalks
    - Pedestrians and Bikers

- Build Transit Center

  We have been working on conceptual plans to make this a multi-modal center. The Amtrak station is just north in the City of Birmingham. They would like to move the SMART bus station here and get black sedan and limousine service as well. The City of Troy has approached State Representative Shelly Taub about putting money for the center in the state appropriations bill. They realize funding for the project, estimated at $3 to $4 million for phase one, will require a joint partnership between the federal, state, and local units plus SMART. The local

units of the cities of Troy and Birmingham are already working cooperatively on the proposal. Some of the functions of the center are:
    - Connect all transportation functions
    - Encourage more SMART bus routes
    - Hub for both internal and external access
- Enhance Medi-Go Plus and dial-a- ride services

"You can't build your way out of traffic congestion" is often quoted in literature. In a recent study of 70 metropolitan areas across 15 years, the Surface Transportation Policy Project (STPP, 1999) concluded that metropolitan areas that invested heavily in road capacity expansion fared no better in easing traffic congestion than metropolitan areas that did not. However, Troy's major roads still need to have adequate capacity for system continuity and completion of the roadway network.

If we cannot build our way our of congestion, are we ready for:

- Proper pricing — such as congestion fees, parking surcharges, and premature land-consumption taxes
- Design movements like the New Urbanism, transit-oriented development, and jobs-housing balance
- Privatization of transportation facilities has gained momentum as a means of injecting efficiencies into the build-up of capital infrastructure and to off-load the burdens of road construction from the public to the private sectors. Basically Toll roads
- High-Occupancy Toll, or HOT, lanes. Single Occupant Vehicles (SOV) will have to pay a toll for using the HOV lane for getting to their destination faster.
- Transportation Demand Management
    - **Flex time:** employees can start anytime between 6 and 9, leave anytime between 3:30 and 6:30 to make up their 40 hours
    - **Staggered work hours:** Employees come in at 7AM & leave at 3:30 PM.
    - **Compressed work weeks:** 4 day 10 hours a day; 9 days 9 hours a day (in 2 weeks) Not only eliminates trips on some days, but also forces people to use lower traffic times to get in and out of work
    - **Employers can provide incentives to encourage their employees**

- Intelligent Transportation Systems:
    - Use of high technology for traffic signals systems (improve on SCATS with wireless communications etc)
    - "telematics" – loosely defined as wireless systems that use advanced location tracking and communication technologies to provide motorists with communication, information, and safety and security services.
    - Arterial incident management system - Includes dynamic message signs that will alert drivers of incidents and encourage alternate routes.

- Telecommuting and Virtual Travel:

    - Telecommuting will continue to rise. It will continue to become much easier as nationwide broadband becomes more widely available and the quality and speed improve. In addition, improvements in technology for home office equipment will also make it easier to work from home.
    - Studies have found that telecommuting is more popular with people that have a longer commute then shorter. This suggests for the City of Troy that it could potentially reduce inbound and outbound traffic, but not traffic among those that both live and work in the city.
    - "In speculative studies of the impact of teleworking, usually small percentage reductions in traffic levels are estimated, in each case less than the predicted rise in traffic volumes. So at best increases in teleworking would only take the edge off predicted increases in traffic." *
    - There is also the notion that "Any reduction in travel through technology may be offset by increased latent travel demand, or substitution. Telecommunications may generate trips that would not have occurred without them."*

- E-Business and E-Commerce

    - This would include such things as shopping on-line via the Internet and business-to-business electronic activities. However the effect on freight traffic is unclear. Some studies indicate an increase in freight traffic, while others believe it may result in less traffic as efficiencies and productivity increase and more goods can be delivered with the same or fewer vehicles.

- Electronic Service Delivery

    - Developments in the area of E-learning, Telemedicine, E-government, E-leisure & online media provide increasing avenues for virtual mobility.